

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended) An untapered pinhole disk laminate for use as an order sorting aperture in hard x-ray microscopy using a Fresnel zone plate comprising a multiple of superposed pinhole disks which are bonded or welded together with the positions of the respective center pinholes kept in alignment, thereby forming an untapered hole through the center of the pinhole disk laminate.

Claim 2 (previously presented) The pinhole disk laminate according to claim 1, the thickness of which is adjustable by changing the number of the superposed pinhole disks.

Claim 3 (currently amended) A process for producing a ~~a~~ an untapered pinhole disk laminate for use as an order sorting aperture in hard-x-ray microscopy using a Fresnel zone plate which comprises the steps of superposing a plurality of pinhole disks, ~~allowing passing a wire, a fiber, or a pin or light to pass through the center pinholes and viewing the pinholes containing the wire, fiber, or pin with a microscope and adjusting the relative so that the~~ positions of the respective pinholes are brought of the disks to bring the pinholes into alignment, ~~said wire or fiber or pin,~~ and bonding or welding the superposed pinhole disks together with the positions of their pinholes kept in alignment.

Claim 4 (cancelled) The process according to claim 3, wherein said wire or fiber or pin is used with a microscope or said light is received by a photodetector.

Claim 5 (new) A process for producing an untapered pinhole disk laminate for use as an order sorting aperture in hard x-ray microscopy with a Fresnel zone plate which comprises the

steps of superposing a plurality of pinhole disks, passing light through the pinholes and measuring the intensity of light passing through the pinholes with a photodetector, adjusting the relative positions of the pinholes in the disks to provide a maximum light intensity and to align the pinholes, and bonding or welding the superposed pinhole disks together with the positions of their pinholes kept in alignment.

Claim 6 (new) The method of claim 3 wherein the pinhole disks are made of metal.

Claim 7 (new) The method of claim 6 wherein the metal is platinum.

Claim 8 (new) The method of claim 5 wherein the pinhole disks are made of metal.

Claim 9 (new) The method of claim 8 wherein the metal is platinum.

Claim 10 (new) The laminate of claim 1 wherein the disks are made of metal.

Claim 11 (new) The laminate of claim 10 wherein the metal is platinum.

Claim 12 (new) The laiminate of claim 2 wherein the disks are made of metal.

Claim 13 (new) The laminate of claim 12 wherein the metal is platinum.